

METHOD AND APPARATUS FOR INCREASING A PROBABILITY THAT  
A DUAL-BAND MOBILE STATION WILL ACQUIRE A DESIRED  
AUTONOMOUS SYSTEM

ABSTRACT OF THE DISCLOSURE

A method for operating a dual-band mobile station (10) includes a first step of (a) storing information in the mobile station. The stored information includes an ordered list of frequency bands (Band Order Table 24A). For example, at least one frequency band is an 800 MHz frequency band and at least one other frequency band is a 1900 MHz frequency band. The stored information further includes an identity (24B) of a band wherein an acceptable control channel was last located. A next step (b) is executed in response to a user invoking a search procedure to locate a new non-public system. This step accesses the memory to determine the identity of the band wherein an acceptable control channel was last located, and marks this band as a band to be searched. A next step (c) collects signal strength measurements on channels in the band to be searched and executes a channel search procedure to locate a control channel of a desired non-public system within the band to be searched. If a desired non-public system is not located in the band to be searched, a next step (d) accesses the memory to obtain a next band to be searched from the Band Order Table. The method repeats steps (c) and (d) until either the ordered list of frequency bands is exhausted or a desired non-public system is located, thereby enabling a non-public system to be located in a band other than the current band of the mobile station.